# **Yuma County Report**

2004 Behavioral Risk Factor Surveillance System (BRFSS)

Steps to a Healthier Arizona Initiative

by

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The Behavioral Risk Factor Surveillance System (BRFSS) was designed to provide surveillance for certain behaviors and conditions associated with the leading causes of death and other important health issues. Various public health programs, such as the Steps to a Healthier Arizona Initiative, use this system to monitor progress using certain performance measures. The 2004 BRFSS was conducted among adults aged 18 and over in the state of Arizona. This report provides prevalence estimates of certain risk behaviors and the health status of Yuma County adult residents. These estimates are then compared with estimates for the state of Arizona. Where available, this report also provides estimates by gender, age group, race/ethnicity, education, and income.

# **Key Findings**

- Twenty-two percent (22%) of Yuma County respondents reported that they did not have any kind of health care coverage. One-third (33%) of respondents reported not having one person they think of as their personal health care provider. Eleven percent (11%) of all respondents reported that they could not see a doctor when they needed to because of costs. The mean number of healthy days in the past month reported by Yuma County respondents was 25 days. These results suggest the need for improved access to quality health care. Interventions must focus on eliminating health disparities in health care access, including the removal of certain structural, financial, and personal barriers.
- Approximately ten percent (10%) of Yuma County respondents reported that a doctor had told them that they had asthma. Of the ten percent, two-thirds (66%) self-reported that they currently have asthma. Since there is no cure for asthma, persons with the disease must learn to control their symptoms to avoid hospitalization and death. Interventions that include education and proper self-management will help to improve the lives of people with asthma.
- Sixteen percent (16%) of Yuma County respondents reported being current smokers. These results suggest the need for continued interventions and cessation opportunities for current smokers, as well as efforts to prevent people from starting to smoke, especially youth. There is sufficient evidence to associate cigarette smoking with negative health outcomes, such as many forms of cancer.
- Less than six percent (5.9%) of Yuma County respondents said that a doctor had told them they were diabetic, other than during pregnancy. The proportion of people with diabetes is growing, and there is an obvious need for education interventions that stress the importance of prevention, early detection, and self-management.
- Twenty-two (22%) of adult survey respondents in Yuma County reported eating at least 5 fruits and vegetables per day. Forty-nine percent (49%) of respondents reported meeting physical activity recommendations. These findings show the need to promote healthy behaviors, including proper nutrition and physical activity. Community involvement will be important in promoting the proper messages.
- Sixty-four percent (64%) of respondents in Yuma County were overweight (BMI greater than or equal to 25). Twenty-four percent (24%) were obese (BMI greater than or equal to 30). Once again, these results show the need to promote a healthy lifestyle. To prevent many chronic diseases, interventions must focus on nutrition and physical activity. Education will not be enough however, as certain barriers will need to be removed in order to provide the opportunities necessary for people to become healthy.

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The Arizona Behavioral Risk Factor Survey (BRFS) is a part of the Behavioral Risk Factor Surveillance System (BRFSS), developed by the Centers for Disease Control and Prevention (CDC). The yearly survey focuses on behaviors and conditions that are associated with the leadings causes of death, as well as other important health issues. Collected information is then used in planning, conducting, and evaluating public health programs.

One such program is the Steps to a Healthier Arizona Initiative, which aims to reduce the burden of asthma, diabetes and obesity by addressing three related risk factors, that is, tobacco use, imbalanced nutrition, and physical inactivity. Three border counties (Yuma, Santa Cruz, and Cochise) and one sovereign nation (Tohono O'odham Nation) are currently involved in this community-driven initiative. For the 2004 Arizona BRFS, the Steps Program funded the oversampling and increased data collection in these four regions.

The intent of this report is to inform Steps community leaders, sub-contractors, and partners about the current status of certain health performance measures in order to monitor the progress of the Steps Program. Also, this report can aid health professionals in gauging community progress in achieving the Healthy People 2010 objectives.

The following report contains select information from the 2004 Arizona BRFS pertaining to each Steps-related indicator. Within each section, there is background information, an overview of county-specific data from the 2004 BRFS, and a discussion with recommendations. The sections are as follows:

- 1) General Health and Access to Care
- 2) Asthma
- 3) Tobacco Use
- 4) Diabetes
- 5) Healthy Eating and Physical Activity
- 6) Overweight and Obesity

Table 1. Weighted demographic characteristics for Yuma County (2004 BRFS)

Gender	%	Age	%	Race/Ethnicity	%
Male	50.1%	18-24	14.2%	White, Non-Hispanic	52.5%
Female	49.9%	25-34	16.0%	Non-White, Non-Hispanic	3.4%
		35-44	17.9%	Hispanic	44.1%
		45-54	14.8%		
		55-64	12.7%		
		65+	24.4%		

The 2004 Arizona BRFS was conducted using a random sample telephone survey, and used a Disproportionate Stratified Sampling (DSS) strategy. Interviewers used random digit dialing to select participants and Computer Assisted Telephone Interviewing (CATI) to administer the surveys to adults aged 18 years and older. The survey has the potential to represent 91.8 percent of all households in Arizona, since this many households have been reported by the Arizona Department of Economic Security to have household telephones in 2004.<sup>1</sup>

For the state of Arizona, a total sample size of 4,700 interviews was selected over a 12-month period in 2004 to achieve an acceptable 95% confidence interval of  $\pm 3\%$  on risk factor prevalence estimates of the adult population. This means that the estimated prevalence of a given risk factor can be reliably projected across the total population of Arizona residents. Prevalence estimates of individual demographic variables, especially those that yield smaller sample sizes, do not achieve the same level of accuracy as the total sample.

The collected data were compiled and weighted by the CDC. Weighted counts were based on the Arizona population to accurately reflect the population demographics. The weighting factor considered the number of adults and telephone lines in the household, cluster size, stratum size, and age/race/sex distribution of the general population.

In order to attain a sufficient sample size for each Steps community within Arizona, the Steps to a Healthier Arizona Initiative funded the over-sampling of these communities, resulting in a total of 498 interviews for Yuma County alone. It is important to note, however, that the samples from Yuma, Santa Cruz, and Cochise counties were still not large enough to have proper estimates on many questions; therefore, statistics were reported here only for those items that had sufficient data.

#### References

1. Federal Communications Commission (FCC). Trends in Telephone Service. June 21, 2005. Available at http://www.fcc.gov/wcb/iatd/trends.html

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# **Background**

Access to quality health care is important in eliminating health disparities and increasing the quality and quantity of life for all persons in the United States, which are the two overarching goals of Healthy People 2010. Access to health care services is strongly predicted by having health insurance and a higher income level. Persons with health insurance are more likely to have a primary care provider and to receive appropriate preventive care. However, even for those who have health insurance, many lack a usual source of ongoing primary care.<sup>1</sup>

Additionally, substantial disparities exist in health insurance coverage for certain populations. Individuals may face barriers to receiving services, such as not having health care facilities or health professionals nearby, or not having the financial capacity to cover certain services. They may also face personal barriers such as sexual orientation, cultural differences, language barriers, physical distance, and lack of transportation.<sup>1</sup>

# Overview

Twenty-two percent (22%) of Yuma County respondents reported that they did not have any kind of health care coverage. Only 3% of respondents aged 65 years or older did not have insurance, compared to 27% of respondents aged 35-44. Forty-one percent of Hispanic respondents reported not having health care coverage, compared to only 7.4% of the non-Hispanic white respondents. One-third (33%) of respondents reported not having one person they think of as their personal health care provider. Hispanic respondents were much less likely to have a personal health care provider (57%) than non-Hispanic whites (75%).

Figure 1. Percent of Adult BRFSS respondents who reported not having any kind of health coverage.

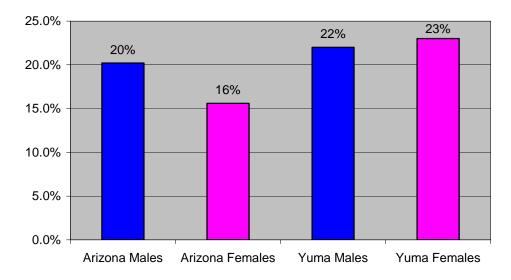


Figure 2. Respondents $\geq$ 18 years who report having any kind of health care coverage.					
		Has insurance = Yes			
Domain	Value	n	%	95% CI	
Respondent Sex	Male	136	78	69.84 - 86.1	
	Female	275	77	71.59 - 82.7	
Respondent Race White/Non-Hisp		274	93	88.63 - 96.5	
	Black or Af. Am/Non-Hisp		N/A		
	Oth. Race/Non-Hisp	8	N/A		
	MultiRacial/Non-Hisp		N/A		
	Hispanic	123	59	49.49 - 67.6	

Eleven percent (11%) of all respondents reported that they could not see a doctor when they needed to because of costs, including 15% of Hispanic respondents and only 6.6% of non-Hispanic white respondents. Persons with annual incomes between \$15,000 and \$24,999 were significantly more likely to skip medical care because of cost (21%) than respondents with incomes between \$35,000 and \$49,999 (4.6%) and those between \$50,000 and \$74,999 (1.0%).

		Skipped health care because of cos Yes			
Domain	Value	n	%	95% CI	
Respondent Sex	Male	13	7.6	3.37 - 11.86	
	Female	42	13	9.3 - 17.67	
Respondent Race	White/Non-Hisp	21	6.6	3.52 - 9.57	
	Black or Af. Am/Non-Hisp	0	N/A		
	Oth. Race/Non-Hisp	2	N/A		
	MultiRacial/Non-Hisp	1	N/A		
	Hispanic	31	15	9.49 - 20.97	
Income Level	Less than \$15,000	12	N/A		
	\$15,000-24,999	26	21	12.09 - 29.0	
	\$25,000-34,999	8	11	3.71 - 19.21	
	\$35,000-49,999	2	4.6	0 - 10.94	
	\$50,000-74,999	1	0.91	0 - 2.69	
	\$75,000+	0	N/A		

The mean number of healthy days in the past month reported by Yuma County respondents was 25 days. Respondents with less than a high school education reported less healthy days (23) than college graduates (27), and those with an income level of less than \$15,000 reported significantly less healthy days in the past month (17) than the higher income groups (24 days, 25 days, 25 days, and 26 days, respectively).

		<b>Number of Healthy Days</b>		
Domain	Value	n	Mean	95% CI
Respondent Sex	Male	161	25	23.31-26.4
	Female	327	24	23.04-25.1
Respondent Age	18-24 years	35	N/A	
	25-34 years	73	26	24.36-27.7
	35-44 years	101	24	21.35-25.
	45-54 years	71	22	18.5-25.6
	55-64 years	58	25	22.92-27.7
	65+ years	149	24	21.76-25.5
Respondent Race	White/Non-Hisp	284	25	23.91-26.2
	Black or Af. Am/Non-Hisp	5	N/A	
	Oth. Race/Non-Hisp	10	N/A	
	MultiRacial/Non-Hisp	1	N/A	
	Hispanic	188	24	22.54-25.6
Education Level	Less Than HS	101	23	20.77-25.1
	HS or GED	150	24	21.49-25.
	Some Post HS	137	25	23.46-26.6
	College Graduate	99	27	25.25-28.1
Income Level	Less than \$15,000	66	17	12.69-20.9
	\$15,000-24,999	116	24	21.99-25.
	\$25,000-34,999	69	25	22.75-27.4
	\$35,000-49,999	63	25	23.38-27.5
	\$50,000-74,999	67	26	24.02-28.4
	\$75,000+	49	N/A	

#### Discussion

Lack of health insurance has been associated with delayed health care and increased mortality. Underinsurance (i.e., the inability to pay out-of-pocket expenses despite having insurance) may also result in adverse health consequences. People who do not have insurance are more likely than their insured counterparts to not have a primary health care provider and not receive appropriate preventive care, both of which have a negative impact on health outcomes.

To assess access to health care, Healthy People 2010 has identified two main objectives: to increase the proportion of persons with health insurance to 100%, and to increase the proportion of persons who have a specific source of ongoing care to 96%. However, specific barriers to health care access need to be addressed in order to fully meet the Healthy People 2010 objectives. Access cannot be achieved unless financial, structural, and personal barriers have been removed.

Figure 5. Healthy People 2010 objectives related to access to care, prevalence rates.<sup>1</sup>

Objective	1998 Baseline (U.S.)	2010 Target (U.S.)
Increase in persons with health		
insurance		
Adults under age 65	83%	100%
Increase in persons with a specific		
source of ongoing care		
All ages	87%	96%
Adolescents age 17 and under	93%	97%
Adults age 18 and older	85%	96%
Increase in persons with a usual	77%	85%
primary care provider		

Measuring and comparing the mean number of health days among specific populations will also help to evaluate the progression towards the two major goals of Healthy People 2010, which are to 1) increase the quality and quantity of life, and 2) to eliminate health disparities. Monitoring the number of healthy days among populations is especially beneficial to chronic disease programs, because it shows the direct impact of long-term health conditions on quality of life.<sup>2</sup>

# References

- 1. U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.
- 2. Centers for Disease Control and Prevention. Measuring Healthy Days. Atlanta, Georgia: CDC, November 2000.

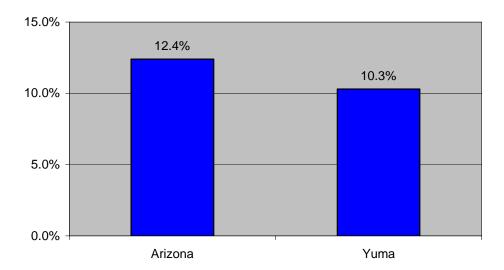
# **Background**

Asthma is a chronic inflammatory lung disease defined by acute episodes of persistent and distressing episodes of wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. Asthmatics are extremely sensitive to environmental exposures such as tobacco smoke, air pollutants, and allergens along with other factors such as respiratory infections and exercise. If not managed properly, asthma can be life-threatening.

Asthma is a serious and growing health problem. In 2003, it was estimated that over 31 million persons in the United States (111 people per 1,000) have at some point in their lifetime been diagnosed with asthma.<sup>3</sup> This is a prevalence rate of 11% for adults. Asthma is responsible for approximately 500,000 hospitalizations, 5,000 deaths, and 134 million restricted activity days annually.<sup>4</sup> Yet people with asthma could avoid most of the problems cause by asthma if they and their health care providers managed the disease according to accepted guidelines.

# **Overview**

Figure 1. Percentage of adult BRFSS respondents who report being told by a doctor that they have asthma.



Approximately ten percent (10%) of Yuma County respondents reported that a doctor had told them that they had asthma. Of the ten percent, two-thirds (66%) self-reported that they currently have asthma. There was insufficient data to compare this indicator across age groups, income levels, education levels, or race/ethnicity. Additionally, there was insufficient data to analyze the other asthma-related Steps Core Performance Measures.

#### **Discussion**

About two-thirds of the adult population of Yuma County reported having asthma. These people are at a higher risk of experiencing poor health outcomes, including hospitalization and even death. It is important to develop and implement a long-term and multifaceted solution for this complex disease. The solution must include education, treatment, and the provision of ongoing medical care and observation for people with the disease. Also, the solution needs to stress the importance of self-management; of altering behaviors that lead to asthma or worsen the condition, and eliminating or avoiding certain triggers. <sup>1</sup>

There is no known cause for the development of asthma, nor is there a cure. Asthma can be controlled, however, by knowing the warning signs of an attack, avoiding asthma-related triggers, and following medical advice. Proper case management of asthma should avert many emergency visits and hospital stays as well as much of the anxiety associated with asthma. Management is crucial in avoiding asthma-related hospitalization and death.

Often, asthma can be difficult to diagnose, especially in young children. Regular physical exams can help make the correct diagnosis. Routine screenings performed by health care professionals can help increase early diagnoses, and provide the opportunities for education about proper asthma management. Education is the key, not only for people with asthma, but also for their families and caregivers, and for physicians and researchers as well. Without the proper resources provided by health care professionals, it is difficult for asthmatics to control their symptoms.

Increased efforts are needed to address the characteristics of healthy indoor environments. The Institute of Medicine identified ways to reduce the following levels of environmental exposures in the home: <sup>1</sup>

- Dust mites
- Environmental Tobacco Smoke (ETS)
- Cockroaches
- Pets
- Mold

Asthma-related objectives for Healthy People 2010 aim to reduce the number of deaths, hospitalizations, and emergency department visits from asthma, among many others.<sup>6</sup>

Figure 2. Healthy People 2010 objectives related to asthma.<sup>6</sup>

Objective	1998 Baseline (U.S.)	2010 Target (U.S.)
Reduce asthma deaths		
(Death rate per million)		
Children under age 5	2.1	1.0
Children age 5-14	3.3	1.0
Adolescents and adults age 15-34	5.0	2.0
Adults age 35-64	17.8	9.0
Adults age 65 and older	86.3	60.0
Reduce asthma hospitalizations		
(Rate per 10,000)		
Children under age 5	45.6	25
Children and adults age 5-64	12.5	7.7
Adults age 65 and older	17.7	11
Reduce asthma ED visits		
(Rate per 10,000)		
Children under age 5	150.0	80
Children and adults age 5-64	71.1	50
Adults age 65 and older	29.5	15

#### References

- 1. CDC. Asthma. Asthma Speaker's Kit for Health Care Professionals. Available at <a href="http://www.cdc.gov/asthma/speakit/intro.htm#intro">http://www.cdc.gov/asthma/speakit/intro.htm#intro</a>
- 2. American Lung Association (ALA). Asthma & Adults Fact Sheet. Available at http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=22596
- 3. National Center for Health Statistics (NCHS). Current Estimates from the National Health Interview Survey U.S., 2003. Washington, DC: Department of Health and Human Services, Public Health Services, Vital and Health Statistics.
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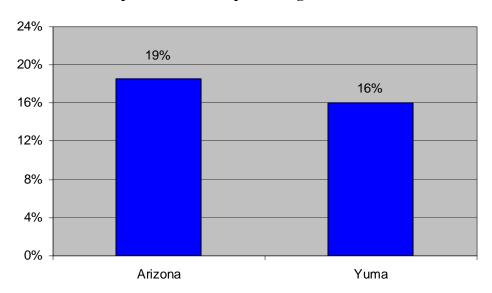
# **Background**

Scientific knowledge about the health effects of tobacco use has increased greatly since the first Surgeon General's report on tobacco was released in 1964. Cigarette smokers are more likely to develop heart disease, stroke, many types of cancer, and chronic lung disease than are nonsmokers. For women, smoking during pregnancy increases the risk of infertility, preterm delivery, stillbirth, low birth weight, and sudden infant death syndrome (SIDS). Studies have also found that exposure to secondhand smoke, or environmental tobacco smoke (ETS), causes heart disease and lung cancer in nonsmoking adults, as well as SIDS, respiratory infections, and more frequent and severe asthma attacks in children.

Despite this increase in knowledge, cigarette smoking remains the leading preventable cause of death in the United States, causing nearly 1 of every 5 adult deaths (438,000 people) each year. This represents more than 5 million years of potential life lost. If current tobacco use patterns persist in the United States, an estimated 5 million persons under age 18 years, in 1995, will die prematurely from a smoking-related disease. Additionally, tobacco use costs the United States approximately \$50-73 billion per year in medical expenses; \$1.4 billion of this is related to smoking during pregnancy.

# **Overview**





Sixteen percent (16%) of Yuma County respondents reported being current smokers. Respondents in the 35-44 years age group were significantly more likely to be smokers (28%) than those 65 years of age or older (11%). There were no other significant differences in the percentage of current smokers across income level, education level, or race/ethnicity.

igure 2. Respondents > 18 years who report having smoked 100 cigarettes in their fetime and are current smokers on every day or some days.				
Current Smoker=Yes				
Domain	Value	n	%	95% CI
Respondent Sex	Male	30	17	10.86 - 23.0
	Female	52	15	11.07 - 19.3
Respondent Age	18-24 years	5	N/A	
	25-34 years	10	13	4.69 - 20.69
	35-44 years	24	28	17.71 - 37.0
	45-54 years	16	17	8.27 - 25.13
	55-64 years	10	14	5.02 - 22.4
	65+ years	17	11	5.57 - 16.7
Respondent Race	White/Non-Hisp	60	21	15.61 - 26.
	Black or Af. Am/Non-Hisp	1	N/A	
	Oth. Race/Non-Hisp	4	N/A	
	MultiRacial/Non-Hisp	1	N/A	
	Hispanic	16	9.6	4.07 - 15.1
Education Level	Less Than HS	12	10	4.26 - 16.69
	HS or GED	26	17	10.53 - 24.3
	Some Post HS	27	21	11.91 - 29.
	College Graduate	17	14	7.04 - 21.43
Income Level	Less than \$15,000	11	13	4.26 - 21.3
	\$15,000-24,999	23	20	10.81 - 29.0
	\$25,000-34,999	10	16	6.73 - 25.53
	\$35,000-49,999	7	N/A	
	\$50,000-74,999	11	15	5.84 - 23.44
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#### Discussion

Efforts to reduce tobacco use in the United States have shifted from focusing primarily on smoking cessation at the individual level, to more population-based interventions. Comprehensive tobacco control programs' goals are to reduce disease, disability, and death related to tobacco use by preventing the initiation of tobacco use, promoting quitting among youth and adults, eliminating nonsmokers' exposure to secondhand smoke, and identifying and eliminating disparities related to tobacco use and its effects among different population groups.<sup>4</sup>

8

N/A

\$75,000+

To address these goals, community programs, media interventions, policy and regulatory activities, and surveillance and evaluation programs are being implemented. Specifically, the following elements are used to build capacity to implement and support tobacco use prevention and control interventions: a focus on change in social norms and environments that support tobacco use, policy and regulatory strategies, community participation, establishment of public and private partnerships, strategic use of media, development of local programs, coordination of statewide and local activities, linkage of school-based activities to community activities, and use of data collection and evaluation techniques to monitor the programs' impact on society.<sup>3</sup>

Tobacco-related goals for Healthy People 2010 aim to reduce illness, disability, and death related to tobacco use and exposure to secondhand smoke.<sup>3</sup> Specific objectives include reducing adult tobacco use, increasing smoking cessation opportunities for adults as well as for women during pregnancy, reducing exposure to tobacco smoke at home among children, and reducing exposure to environmental tobacco smoke, among others.

Figure 3. Healthy People 2010 objectives related to tobacco use, prevalence rates.<sup>3</sup>

Objective	1998 Baseline (U.S.)	<b>2010 Target (U.S.)</b>
Reduce tobacco use by adults		
Cigarette smoking	24%	12%
Reduce the proportion of nonsmokers		
exposed to environmental tobacco smoke		
Age 4 and older	65%	45%
Increase tobacco-free environments in schools		
All middle, junior, and senior high schools	37%	100%

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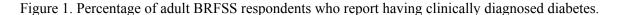
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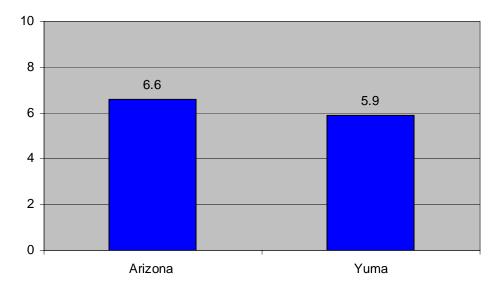
# **Background**

Diabetes is a group of chronic diseases characterized by high blood sugar levels. There are two major types: type 1 diabetes, also referred to as juvenile or insulin-dependent diabetes, and type 2 diabetes, also known as adult-onset or non-insulin dependent diabetes. Type 1 diabetes occurs when the body does not produce insulin, or the hormone responsible for breaking down sugar in the blood stream. Individuals with type 1 diabetes are usually thin, diagnosed at a young age and require daily insulin injections. There is no known way to prevent type 1 diabetes; however, it can be controlled. Type 2 diabetes occurs when the body produces insulin, but the insulin is not used effectively. Individuals with type 2 diabetes are usually overweight, inactive, and are diagnosed as adults. There is no known way to cure type 2 diabetes; however, it can be prevented and controlled. Type 1 diabetes are usually overweight, inactive, and are

Recent estimates suggest that 20.8 million people in the United States, or 7 percent of the population, have diabetes. Of those 20.8 million people with diabetes, approximately 6.2 million do not know that they have diabetes. Serious complications can occur from diabetes, including heart disease and stroke, high blood pressure, blindness, kidney disease, nervous system disease, amputations, dental disease, complications of pregnancy, and even premature death. To lower the risk of complications, people with diabetes can take steps towards controlling the disease.<sup>1</sup>

#### Overview





Less than six percent (5.9%) of Yuma County respondents said that a doctor had told them they were diabetic (other than during pregnancy), with female respondents being significantly more likely to be diabetic (8.8%) than males (3%). Respondents age 65 or older were much more likely (14%) to have been told they were diabetic than respondents age 25-34 (1.2%). There was insufficient data to analyze the other diabetes-related Steps Core Performance Measures.

2.77 - 12.35

1.9 - 18.14

0 - 8.41

0 - 5.94

7.6

10

4.2

2.5

N/A

		Clinically Diabetic=Yes		
Domain	Value	n	%	95% CI
Respondent Sex	Male	7	3	0.69 - 5.33
	Female	28	8.8	5.38 - 12.1
Respondent Age	18-24 years	0	N/A	
	25-34 years	1	1.2	0 - 3.55
	35-44 years	6	5.2	0.41 - 10
	45-54 years	4	5.5	0.14 - 10.8
	55-64 years	4	5	0.13 - 9.8
	65+ years	20	14	7.48 - 19.7
Respondent Race	White/Non-Hisp	19	5.9	3.08 - 8.6
	Black or Af. Am/Non-Hisp	1	N/A	
	Oth. Race/Non-Hisp	1	N/A	
	MultiRacial/Non-Hisp	0	N/A	
	Hispanic	14	5.4	2.3 - 8.51
Education Level	Less Than HS	11	8.1	2.81 - 13.3
	HS or GED	15	9	4.27 - 13.7
	Some Post HS	6	3.6	0.51 - 6.6
	College Graduate	3	2.3	0 - 5.05
Income Level	Less than \$15,000	7	10	1.67 - 18.6

10

6

4

2

\$15,000-24,999

\$25,000-34,999

\$35,000-49,999

\$50,000-74,999

\$75,000+

Figure 2: Respondents aged greater than 18 years who report ever having been told by a doctor that they have diabetes, other than diabetes during pregnancy

#### **Discussion**

Diabetes is becoming a significant public health problem in Arizona, and will pose an immense burden on various health care delivery systems in the near future. Currently, 6.6 percent of Arizona adults, or 284,102 people, have been diagnosed with diabetes. In 2004, there were more than 91,000 hospitalizations of persons with diabetes, with hospital charges amounting to more than \$2.5 billion. According to various measures of diabetes prevalence, mortality, hospitalization and major risk factors, current rates are worsening, and this increase is seen among all racial/ethnic groups; however, certain populations have been affected more than others. Additionally, changing demographic patterns in the United States are expected to cause an increase in the number of people who are at risk for diabetes and an increase in those who eventually develop the disease.

To reduce the incidence of diabetes and control the costs associated with diabetes care, we must encourage activities now that will delay the onset of complications and even prevent diabetes from occurring at all. Prevention activities for type 2 diabetes include promoting a healthy lifestyle, which consists of physical activity and balanced nutrition. Self-management training for those with diabetes should also include the importance of physical activity and proper nutrition, in addition to treatment with oral tablets or insulin. To prevent complications from

diabetes, individuals must learn control their glucose levels, blood pressure, blood lipids, and participate in preventive care for their eyes, kidneys, and feet.

In addition to early detection, improved delivery of care, and better education on diabetes self-management, it is important to promote policies that would improve both quality of care and access to care, which is one of the overarching goals of Healthy People 2010. Additionally, to reduce diabetes-related health disparities, which is another overarching goal of Healthy People 2010, programs specific to high-risk populations will be needed to control the rising incidence among these groups. Other specific diabetes-related objectives for Healthy People 2010 aim to reduce the prevalence of diabetes and its economic burden through prevention programs, and improve the quality of life for all persons who have or are at risk of developing diabetes.<sup>3</sup>

Figure 3. Healthy People 2010 objectives related to diabetes.<sup>3</sup>

Objective	1998 Baseline (U.S.)	2010 Target (U.S.)
Prevent new cases of diabetes	3.5	2.5
(Rate per 1,000)		
Reduce the diabetes death rate	75	45
(Death rate per 100,000)		
Increase in persons with diabetes	45%	60%
who receive formal diabetes		
education		
(Prevalence rates)		
Increase in persons with diabetes	68%	80%
whose condition has been diagnosed		
(Prevalence rates)		

#### References

- 1. CDC. National Diabetes Fact Sheet, 2005. Available at http://www.cdc.gov/diabetes/pubs/estimates05.htm#prev
- 2. Arizona Department of Health Services (ADHS). Diabetes in Arizona: Status Report, 2005. Available at <a href="https://www.azdhs.gov/phs/oncdps/diabetes/pdf/status-report-05.pdf">www.azdhs.gov/phs/oncdps/diabetes/pdf/status-report-05.pdf</a>
- 3. U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.

# **Background**

A healthy lifestyle includes both healthy eating and regular physical activity. Balanced nutrition is essential for growth and development, as well as for health and well-being, and should include a diet low in saturated fats and include at least five servings of fruits and vegetables each day. Imbalanced nutrition, among other dietary factors, contributes substantially to the burden of preventable illness and premature death in the United States, as well as in Arizona. Four of the ten leading causes of death can be associated with nutrition: coronary heart disease, some types of cancer, stroke, and type 2 diabetes. It has been estimated that these health conditions cost society over \$200 billion each year in medical expenses and lost productivity. <sup>1</sup>

Engaging in regular physical activity can enhance the quality of life for people of all ages, help maintain functional independence of the elderly, and can allow people outlive those who are inactive. More specifically, physical activity can reduce the risk of developing or dying from heart disease, diabetes, colon cancer, high blood pressure, obesity, and osteoporosis, and it may even protect against lower back pain, arthritis, and some forms of cancer. Being physically inactive puts one at risk for both financial risks and medical risks for many of these chronic diseases and conditions.<sup>1</sup>

Both diet and physical activity have been known to play a major role in the quality of long-term health for years, and an imbalanced diet is one of the most significant controllable risk factors for poor health status. If the typical American diet and physical activity habits were to be improved, productive life span would likely increase, and the occurrence of many chronic diseases would likely decrease. The promotion of healthful eating habits and a regular physical activity routine should be stressed, as they are important and should begin early in life to ensure the continuation of these habits.

#### Overview

Twenty-two (22%) of adult survey respondents in Yuma County reported eating at least 5 fruits and vegetables per day. Differences in gender were found: males in Yuma County were significantly less likely (14%) to report that they eat at least 5 fruits and vegetables per day than females (30%).

Forty-nine percent (49%) of Yuma County respondents reported meeting physical activity recommendations (they engage in at least moderate physical activity for at least 30 minutes, five times per week or more, or who engage in vigorous activity for more than 20 minutes, three times per week or more). For both fruit and vegetable consumption and physical activity, there were no significant differences among respondents of different incomes, age groups, or race/ethnicity.

Figure 1. Percentage of adults who reported eating  $\geq 5$  fruits and vegetables a day.

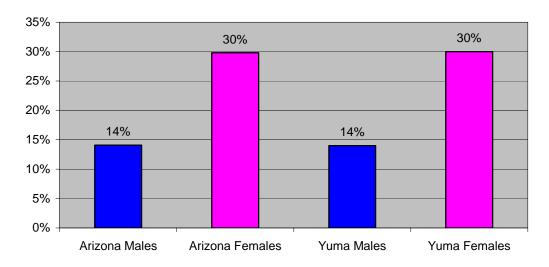


Figure 2. Percentage of adults who reported meeting the recommended amount of physical activity.

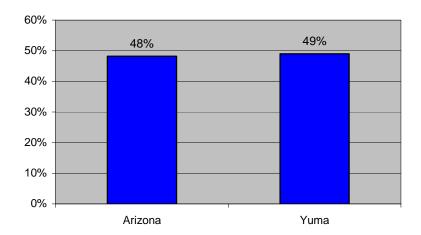


Figure 3. Adults  $\geq$  18 years who report moderate physical activity for  $\geq$  30 minutes 5+ times per week or vigorous physical activity for  $\geq$  20 minutes 3+ times per week.

		Meets Recommendations=Yes			
Domain	Value	n	%	95% CI	
Respondent Sex	Male	75	52	42.45 - 62.2	
	Female	150	46	39.71 - 52.1	
Respondent Race	White/Non-Hisp	142	55	48.17 - 62.0	
	Black or Af. Am/Non-Hisp	3	N/A		
	Oth. Race/Non-Hisp	5	N/A		
	MultiRacial/Non-Hisp	0	N/A		
	Hispanic	75	40	30.79 - 49.1	

#### **Discussion**

Healthful dietary and physical activity behaviors need to be established in childhood, and must be continued through adulthood. To maintain these habits, permanent lifestyle changes must be made, including changes to the physical and social environment. Promotion efforts should include public education about the long-term health consequences and risks associated with poor dietary habits and sedentary behaviors. Efforts should also include building and sustaining broad-based initiatives, as well as commitment, by public and private sector partners at the national, state, and local levels.<sup>1</sup>

The 2000 *Dietary Guidelines for Americans* recommend that, in order to stay healthy, all persons over 2 years of age should aim to meet the following "ABC" recommendations.<sup>2</sup>

- Aim for fitness: aim for a healthy weight, and be physically active every day
- **B**uild a healthy base: use the Food Guide Pyramid to make good food choices by eating a variety of grains daily, including whole grains, as well as a variety of fruits and vegetables daily
- Choose sensibly: choose a diet low in saturated fats and cholesterol, limit sugar and salt intake, and if drinking alcoholic beverages, do so in moderation

The CDC recommends that adults should strive to meet either of the following physical activity recommendations:<sup>3</sup>

• Adults should engage in moderate intensity physical activities for at least 30 minutes on 5 or more days per week

OR

• Adults should engage in vigorous intensity physical activity for 20 or more minutes on 3 or more days per week

Figure 4. Healthy People 2010 objectives related to nutrition, prevalence rates. 1

Objective	1994-96 Baseline	<b>2010 Target (U.S.)</b>
	(U.S.)	
Increase the proportion of persons $\geq 2$ years	28%	75%
who consume $\geq 2$ daily servings of fruit		
Increase the proportion of persons $\geq 2$ years	3%	50%
who consume $\geq 3$ daily servings of vegetables,		
with ≥ one-third being dark green or orange		
Increase the proportion of persons $\geq 2$ years	7%	50%
who consume $\geq$ 6 daily servings of grain, with		
$\geq$ 3 being whole grains		

Figure 5. Healthy People 2010 objectives related to physical activity, prevalence rates.<sup>1</sup>

Objective	1997 Baseline (U.S.)	<b>2010 Target (U.S.)</b>
Reduce the proportion of adults who engage	40%	20%
in no leisure-time physical activity		
Increase the proportion of adults who engage	15%	30%
regularly in moderate physical activity		
Increase the proportion of adults who engage	23%	30%
regularly in vigorous physical activity		

# References

- 1. U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.
- 2. USDA and U.S. Department of Health and Human Services (HHS). *Dietary Guidelines for Americans*. 5th ed. USDA Home and Garden Bulletin No. 232. Washington, DC: USDA, 2000.
- 3. CDC. Physical Activity for Everyone: Recommendations, 2006. Available at <a href="http://www.cdc.gov/nccdphp/dnpa/physical/recommendations/index.htm">http://www.cdc.gov/nccdphp/dnpa/physical/recommendations/index.htm</a>

# **Background**

Eating more calories from food than what is expended in physical activity leads to overweight. To maintain a healthy weight, it is necessary to balance energy intake and energy output. This balance is influenced by metabolic and genetic factors, certain behaviors that affect diet and physical activity, as well as other environmental, cultural, and socioeconomic components. Unfortunately, the number of overweight and obese people in the United States has risen dramatically in the past 20 years, and can largely be attributed to an imbalanced diet and inactive lifestyle. Persons who are overweight or obese are at an increased risk for many different conditions and diseases, including high blood pressure, high cholesterol, type 2 diabetes, heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, some forms of cancer, and even psychological disorders. Often, the negative health outcomes associated with these conditions can be improved through weight loss, or the prevention of further weight gain. Currently, 60 percent of Americans are either considered overweight or obese. 

1

Overweight and obesity are measured according to a body mass index (BMI), which is calculated from height and weight. A person is considered overweight if their BMI is greater than or equal to 25, and a person is considered obese if their BMI is greater than or equal to 30.<sup>2</sup> BMI has been shows to be a reliable indicator of body fatness for people, and is inexpensive and easy to perform. Overall, it is a good screening tool to identify weight problems among adults.

#### Overview

Sixty-four percent (64%) of respondents in Yuma County were overweight (BMI greater than or equal to 25), with significantly more male respondents (71%) being overweight than female respondents (56%). In the 35-44 age group, 79% of respondents were overweight, compared to 58% of respondents who were at least 65 years of age. Twenty-four percent (24%) were obese (BMI greater than or equal to 30), with no significant differences among age groups, gender, income, or education level. However, Hispanic respondents were much more likely to be obese (34%) than white, non-Hispanic respondents (16%).



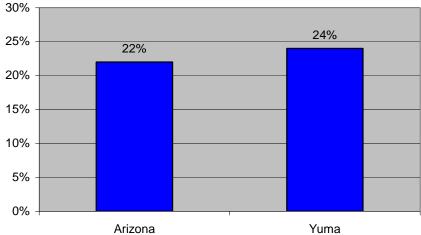


Figure 2. Respondents aged $\geq$ 18 years who have a body mass index (BMI) $\geq$ 25.0 (overweight) calculated from self-reported weight and height.				
(overweight) calculate	a trom self-reported weight a		verweight	OR Obese
Domain	Value	n	%	95% CI
Respondent Sex	Male	117	71	62.48 - 79.1
	Female	169	56	49.24 - 61.8
Respondent Age	18-24 years	9	N/A	
	25-34 years	39	N/A	
	35-44 years	68	79	70.09 - 87.5
	45-54 years	43	N/A	
	55-64 years	43	N/A	
	65+ years	83	58	49.04 - 67.4
Respondent Race	White/Non-Hisp	157	58	51.01 - 64.4
	Black or Af. Am/Non-Hisp	2	N/A	
	Oth. Race/Non-Hisp	6	N/A	
	MultiRacial/Non-Hisp	1	N/A	
	Hispanic	120	71	62.19 - 79.9

			% Ob	ese
Domain	Value	n	%	95% CI
Respondent Sex	Male	36	22	13.95 - 30
	Female	71	26	20.1 - 31.3
Respondent Age	18-24 years	4	N/A	
	25-34 years	19	N/A	
	35-44 years	24	N/A	
	45-54 years	16	N/A	
	55-64 years	22	N/A	
	65+ years	22	14	8.28 - 20.6
Respondent Race	White/Non-Hisp	46	16	11.26 - 20.
	Black or Af. Am/Non-Hisp	2	N/A	
	Oth. Race/Non-Hisp	2	N/A	
	MultiRacial/Non-Hisp	1	N/A	
	Hispanic	56	34	24.07 - 43.

# **Discussion**

Many of the recommendations found in the "Healthy Eating and Physical Activity" section apply to the prevention and control of overweight and obesity. Engaging in regular physical activity, along with choosing a balanced healthy diet, will help to maintain a healthy weight, and will aid in avoiding many diseases and conditions that are commonly associated with being overweight or obese.

Healthy People 2010 established specific objectives related to overweight and obesity, as well as nutrition and physical activity. Several actions are recognized as fundamental in achieving these objectives:<sup>2</sup>

- Improving accessibility of nutrition information, nutrition education, nutrition counseling and related services, and healthful foods in a variety of settings and for all population groups
- Focusing on preventing chronic disease associated with diet and weight, beginning in youth
- Strengthening the link between nutrition and physical activity in health promotion
- Maintaining a strong national program for basic and applied nutrition research to provide a sound science base for dietary recommendations and effective interventions
- Maintaining a strong national nutrition monitoring program to provide accurate, reliable, timely, and comparable data to assess status and progress and to be responsive to unmet data needs and emerging issues
- Strengthening State and community data systems to be responsive to the data users at these levels
- Building and sustaining broad-based initiatives and commitment to these objectives by public and private sector partners at the national, state, and local levels

One of the national health objectives for the year 2010 is to reduce the prevalence of obesity among adults to less than 15%; however current data indicate that the situation is actually worsening, rather than improving. Major efforts are needed to improve the current situation. The Surgeon General has called for individuals, families, communities, schools, worksites, health care, media, industry, organizations, and government to determine their role and take action to prevent and decrease overweight and obesity.<sup>3</sup>

Figure 4. Healthy People 2010 objectives related to nutrition, prevalence rates.<sup>2</sup>

Objective	1988-94 Baseline	<b>2010 Target (U.S.)</b>
	(U.S.)	
Increase the proportion of adults who are at a	42%	60%
healthy weight		
Reduce the proportion of obese adults	23%	15%

#### References

- 1. Behavioral Risk Factor Surveillance System, 2004.
- 2. U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.
- 3. U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. [Rockville, MD]: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; [2001]. Available from: U.S. GPO, Washington.

Arizona, along with the rest of the United States, is currently facing epidemic proportions of many diseases and/or health conditions. Asthma incidence has increased, tobacco use continues to be a problem, diabetes incidence is rising dramatically, more people are choosing unhealthy diets and sedentary lifestyles, and the proportion of people who are overweight or obese is the highest it has ever been. Combining this with the issues revolving around access to quality health care presents major problems.

Current efforts to control and prevent these issues include Healthy People 2010, which has provided national goals, objectives, and targets for many of these diseases and conditions. On the local level, the Steps to a Healthy Arizona Initiative has provided its own goals and objectives for four Arizona communities. The progress of this initiative will continue to be monitored using several core performance measures, and various surveillance systems, such as the BRFSS.

The BRFSS is an integral part of the surveillance for many of the diseases, conditions, and behaviors mentioned in this report. It provides national information, as well as state-specific statistics for many important indicators used to assess various health objectives. The state statistics can then be broken down by county in order to examine geographic trends. Future surveys will allow us to evaluate the health status and visualize health trends among of Americans, Arizonans, and county residents over time.

The BRFSS survey has its limitations. The statistics presented by the BRFSS are based on a sample, and will differ, due to random sampling variability, from statistics that would be derived from a complete census of people with these diseases in Arizona and each specific county. The results are also subject to certain errors and biases from reporting, non-response, and processing; however, these errors are kept to a minimum because of certain survey methods. One major limitation is that the information collected represents self-reports of medically diagnosed conditions. This may underestimate the disease prevalence since not all individuals with these conditions have been properly diagnosed by a medical professional.

Additionally, there are limitations due to sample size. County-specific estimates are based on a much smaller sample size than those estimates given for the state of Arizona, and should be interpreted with caution. The Steps Program funded the over-sampling of Steps communities to increase the proportion of participants sampled in each community; however, due to the nature of certain disease conditions and risk factors, sample sizes for certain questions were insufficient to give proper data estimates. In order to obtain a sufficient sample size to analyze these questions, the data will need to be compiled with data from previous years.

# APPENDIX I: ARIZONA RESPONDENT PROFILE

2004 Arizona Respondent Profile		
GROUPS	WEIGHTED PERCENTAGE	UNWEIGHTED N
Sex		
Male	49.5	1,767
Female	50.5	2,952
Age		
18-24	13.6	275
25-34	19.1	697
35-44	19.3	810
45-54	17.4	881
55-64	12.8	805
65+	17.7	1,251
Education		
Less than High School	14.0	613
High School Graduate or GED	26.7	1,301
Some College or Tech School	27.6	1,401
College Grad	21.6	1,396
<u>Income</u>		
< \$15,000	7.8	556
\$15,000-\$24,999	17.2	884
\$25,000-\$34,999	12.0	632
\$35,000-\$49,999	16.0	732
≥\$50,000	32.5	1,272
Unknown/Refused	14.5	643
Race		
White	69.5	3,250
Non-White	29.9	1,436
Ethnicity		
Hispanic	22.3	1,107
Non-Hispanic	77.5	3,598

Source: 2004 Arizona BRFSS Sample

# **APPENDIX II: 2004 ARIZONA BRFSS QUESTIONS LISTING**

# **CORE SECTIONS**

Section 1: Health Status

Section 2: Healthy Days – Health-related Quality of Life

Section 3: Health Care Access

Section 4: Exercise

Section 5: Environmental Factors

Section 6: Excess Sun Exposure

Section 7: Tobacco Use

Section 8: Alcohol Consumption

Section 9: Asthma

Section 10: Diabetes

Section 11: Oral Health

Section 12: Immunization

Section 13: Demographics

Section 14: Veteran's Status

Section 15: Women's Health

Section 16: Prostate Cancer Screening

Section 17: Colorectal Cancer Screening

Section 18: Family Planning

Section 19: Disability

Section 20: HIV/AIDS

Section 21: Firearms

# **OPTIONAL MODULES**

Module 1: Diabetes

Module 9: Adult Asthma History

Module 10: Childhood Asthma

Module 13: Folic Acid

Module 15: Smoking Cessation

Module 16: Secondhand Smoke Policy

Module 17: Arthritis Burden

Module 18: Arthritis Management

# **STATE ADDED QUESTIONS**

Section 1: Fruits and Vegetables

Section 2: Physical Activity

Section 3: Oral Health

Section 4: Cardiovascular Disease

Section 5: Family Planning

APPENDIX III: 2004 ARIZONA QUESTIONNAIRE		
Section 1: Health Status 1.1. Would you say that in general your health is: Excellent 1 Very good 2 Good 3 Fair 4 Poor 5 Don't know/Not sure 7	3.3. Was there a time in the past 12 months when you needed to see a doctor but could not because of the cost? Yes 1 No 2 Don't know/Not sure 7 Refused 9	
Refused 9  Section 2: Healthy Days  2.1. Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?  Number of days  None 8 8  Don't know/Not sure 7 7  Refused 9 9	Section 4: Exercise 4.1. During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? Yes 1 No 2 Don't know/Not sure 7 Refused 9	
2.2. Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?  Number of days  None 8 8  Don't know/Not sure 7 7  Refused 9 9	Section 5: Environmental Factors 5.1. Things like dust, mold, smoke and chemicals inside the home or office can cause poor indoor air quality. In the past 12 months have you had an illness or symptoms that you think was caused by something in the air inside a home, office, or other building? Yes 1 No 2 Don't know/Not sure 7 Refused 9	
2.3. During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?  Number of days  None 8 8  Don't know/Not sure 7 7  Refused 9 9	5.2. Things like smog, automobile exhaust, and chemicals can cause outdoor air pollution. In the past 12 months have you had an illness or symptoms that you think was caused by pollution in the air outdoors? Yes 1 No 2 Don't know/Not sure 7 Refused 9	
Section 3: Health Care Access 3.1. Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare? Yes 1 No 2 Don't know/Not sure 7 Refused 9	Section 6: Excess Sun Exposure 6.1. Have you had a sunburn within the past 12 months? Yes 1 No 2 Don't know/Not sure 7 Refused 9	
3.2. Do you have one person you think of as your personal doctor or health care provider? Yes, only one 1 More than one 2 No 3 Don't know/Not sure 7 Refused 9	6.2. Including times when even a small part of your skin was red for more than 12 hours, how many sunburns have you had within the past 12 months?  One 1  Two 2  Three 3  Four 4  Five 5  Six or more 6  Don't know/Not sure 7  Refused 9	

Section 7: Tobacco Use 7.1. Have you smoked at least 100 cigarettes in your entire life? Yes 1 No 2 Don't know/Not sure 7 Refused 9  7.2. Do you now smoke cigarettes every day, some days, or not at all? Every day 1 Some days 2 Not at all 3 Refused 9	9.2. Do you still have asthma? Yes 1 No 2 Don't know/Not sure 7 Refused 9
7.3. During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking? Yes 1 No 2 Don't know/Not sure 7 Refused 9	Section 10: Diabetes 10.1. Have you ever been told by a doctor that you have diabetes? Yes 1 Yes, only during pregnancy 2 No 3 Don't know/Not sure 7 Refused 9
Section 8: Alcohol Consumption 8.1. A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. During the past 30 days, how often have you had at least one drink of any alcoholic beverage?  Days per week 1 Days per month 2 No drinks in past 30 days 8 8 8  Don't know/Not sure 7 7 7  Refused 9 9 9  8.2. On the days when you drank, about how many drinks did you drink	Section 11: Oral Health 11.1. How long has it been since you last visited a dentist or a dental clinic for any reason? Within the past year 1 Within the past 2 years 2 Within the past 5 years 3 5 or more years ago 4 Don't know/Not sure 7 Never 8 Refused 9 c on the average?
Number of drinks Don't know/Not sure 7 7 Refused 9 9	
8.3. Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?  Number of times  None 8 8  Don't know/Not sure 7 7  Refused 9 9	11.2. How many of your permanent teeth have been removed because of tooth decay or gum disease? Do not include teeth lost for other reasons, such as injury or orthodontics.  1 to 5 1 6 or more but not all 2 All 3 Don't know/Not sure 7 None 8 Refused 9
8.4. During the past 30 days, how many times have you driven when you Number of times None 8 8 Don't know/Not sure 7 7 Refused 9 9	ou've had perhaps too much to drink?
Section 9: Asthma 9.1. Have you ever been told by a doctor, nurse, or other health profess Yes 1 No 2 Don't know/Not sure 7 Refused 9	ional that you had asthma?

11.3. How long has it been since you had your teeth cleaned by a dentist or dental hygienist? Within the past year 1 Within the past 2 years 2 Within the past 5 years 3 5 or more years ago 4 Don't know/Not sure 7 Never 8 Refused 9	13.4. Which one of these groups would you say best represents your race? White 1 Black/African American 2 Asian 3 Native Hawaiian/Other Pacific Islander 4 American Indian, Alaska Native 5 Other 6 Don't know/Not sure 7 Refused 9
Section 12: Immunization 12.1. During the past 12 months, have you had a flu shot? Yes 1 No 2 Don't know/Not sure 7 Refused 9	13.5. Are you: Married 1 Divorced 2 Widowed 3 Separated 4 Never been married 5 Member of an unmarried couple 6 Refused 9
12.2. During the past 12 months, have you had a flu vaccine that was sprayed in your nose? Yes 1 No 2 Don't know/Not sure 7 Refused 9	13.6. How many children less than 18 years of age live in your household? Number of children None 8 8 Refused 9 9
12.3. Have you ever had a pneumonia shot? This shot is usually given only once or twice in a person's lifetime and is different from the flu shot. It is also called the pneumococcal vaccine. Yes 1 No 2 Don't know/Not sure 7 Refused 9	13.7. What is the highest grade or year of school you completed?  ≤ Kindergarten 1  Elementary 2  Some high school 3  High school graduate 4  Some college/tech school 5  College graduate 6  Refused 9
Section 13: Demographics 13.1. What is your age Code age in years Don't know/Not sure 0 7 Refused 0 9	13.8. Are you currently: Employed for wages 1 Self-employed 2 Out of work for more than 1 year 3 Out of work for less than 1 year 4 Homemaker 5 Student 6 Retired 7 Unable to work 8 Refused 9
13.2. Are you Hispanic or Latino? Yes 1 No 2 Don't know/Not sure 7 Refused 9	
13.3. Which one or more of the following would you say is your race? White 1 Black/African American 2 Asian 3 Native Hawaiian/Other Pacific Islander 4 American Indian, Alaska Native 5 Other 6 Don't know/Not sure 7 Refused 9	13.9. Is your annual household income from all sources:  < \$10,000 01  \$10,000 to < \$15,000 02  \$15,000 to < \$20,000 03  \$20,000 to < \$25,000 04  \$25,000 to < \$35,000 05  \$35,000 to < \$50,000 06  \$50,000 to < \$75,000 07  ≤ \$75,000 08  Don't know/Not sure 77  Refused 99

13.10. About how much do you weigh without shoes? Weight pounds Don't know/Not sure 7 7 7 Refused 9 9 9  13.11. About how tall are you without shoes? Height/ ft/inches Don't know/Not sure 7 7 7 Refused 9 9 9	Section 14: Veteran's Status  14.1. Have you ever served on active duty in the United States Armed Forces, either in the regular military or in a National Guard or military reserve unit?  Yes 1  No 2  Don't know/Not sure 7  Refused 9  14.2. Which of the following best describes your service in the United States military?  Currently on active duty 1  Currently in a National Guard or Reserve unit 2  Retired from military service 3  Medically discharged from military service 4  Discharged from military service 5  Don't know/Not sure 7  Refused 9
13.12. What county do you live in? FIPS county code Don't know/Not sure 7 7 7 Refused 9 9 9	14.3. In the last 12 months have you received some or all of your health care from VA facilities? Yes, all of my health care 1 Yes, some of my health care 2 No, no VA health care received 3 Don't know/Not sure 7 Refused 9
13.13. Do you have more than one telephone number in your household? Do not include cell phones or numbers that are only used by a computer or fax machine.  Yes 1  No 2  Don't know/Not sure 7  Refused 9  13.14. How many of these are residential numbers?  Residential phone numbers Don't know/Not sure 7  Refused 9	Section 15: Women's Health 15.1. A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram? Yes 1 No 2 Don't know/Not sure 7 Refused 9  15.2. How long has it been since you had your last mammogram? Within the past year 1 Within the past 2 years 2 Within the past 3 years 3 Within the past 5 years 4 5 or more years ago 5
13.15. During the past 12 months, has your household been without telephone service for 1 week or more? Yes 1 No 2 Don't know/Not sure 7 Refused 9	Don't know/Not sure 7 Refused 9  15.3. A clinical breast exam is when a doctor or other health professional feels the breasts for lumps. Have you ever had a clinical breast exam? Yes 1 No 2 Don't know/Not sure 7 Refused 9
13.16. Indicate sex of respondent Male 1 Female 2	15.4. How long has it been since your last breast exam? Within the past year 1 Within the past 2 years 2 Within the past 3 years 3 Within the past 5 years 4 5 or more years ago 5 Don't know/Not sure 7 Refused 9
13.17. To your knowledge, are you now pregnant? Yes 1 No 2 Don't know/Not sure 7 Refused 9	

15.5. A Pap test is a test for cancer of the cervix. Hav Yes 1 No 2 Don't know/Not sure 7 Refused 9	e you ever had a Pap test?
15.6. How long has it been since you had your last Pap test? Within the past year 1 Within the past 2 years 2 Within the past 3 years 3 Within the past 5 years 4 5 or more years ago 5 Don't know/Not sure 7 Refused 9	Section 17: Colorectal Cancer Screening 17.1. A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit? Yes 1 No 2 Don't know/Not sure 7 Refused 9
15.7. Have you had a hysterectomy? Yes 1 No 2 Don't know/Not sure 7 Refused 9	17.2. How long has it been since you had your last blood stool test using a home kit? Within the past year 1 Within the past 2 years 2 Within the past 5 years 3 5 or more years ago 4 Don't know/Not sure 7 Refused 9
Section 16: Prostate Cancer Screening 16.1. A prostate-Specific Antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. Have you ever had a PSA test? Yes 1 No 2 Don't know/Not sure 7 Refused 9	17.3. Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?  Yes 1  No 2  Don't know/Not sure 7  Refused 9
16.2. How long has it been since you had your last PSA test? Within the past year 1 Within the past 2 years 2 Within the past 3 years 3 Within the past 5 years 4 5 or more years ago 5 Don't know/Not sure 7 Refused 9	17.4. How long has it been since you had your last sigmoidoscopy or colonoscopy? Within the past year 1 Within the past 2 years 2 Within the past 5 years 3 Within the past 10 years 4 10 or more years ago 5 Don't know/Not sure 7 Refused 9
16.4. How long has it been since your last digital rectal exam? Within the past year 1 Within the past 2 years 2 Within the past 3 years 3 Within the past 5 years 4 5 or more years ago 5 Don't know/Not sure 7 Refused 9	Section 18: Family Planning 18.1. Some things people do to keep from getting pregnant include not having sex at certain times, using birth control methods such as the pill, implants, shots, condoms, diaphragm, foam, IUD, having their tubes tied, or having a vasectomy. Are you doing anything now to keep from getting pregnant? Yes 1 No 2 No partner/not sexually active 3 Same sex partner 4 Don't know/Not sure 7 Refused 9
16.5. Have you ever been told by a doctor or other he Yes 1 No 2 Don't know/Not sure 7 Refused 9	ealth professional that you had prostate cancer?

**Section 19: Disability** 18.2 What are you doing now to keep from 19.1. Are you limited in any way in any activities because of physical, getting pregnant? mental, or emotional problems? Tubes tied 1 Yes 1 Hysterectomy 2 No 2 Vasectomy 3 Don't know/Not sure 7 Pill, all kinds 4 Refused 9 Condoms 5 Contraceptive implants 6 Shots (Depo-Provera) 7 Shots (Lunelle) 8 Contraceptive Patch 9 Diaphragm, cervical ring, or cap 10 **IUD 11** Emergency contraception 12 Withdrawal 13 Not having sex at certain times 14 Other method 15 Don't know/Not sure 77 Refused 99 18.3 What is your main reason for not doing 19.2. Do you now have any health problem that requires you to use special anything to keep from getting pregnant? equipment, such as a cane, a wheelchair, a special bed, or a special Didn't think was going to have sex/ telephone? Yes 1 no regular partner 1 No 2 You want a pregnancy 2 You or your partner don't want to use birth control Don't know/Not sure 7 Refused 9 You or your partner don't like birth control/ fear side effects 4 Can't pay for birth control 5 Lapse in use of a method 6 Don't think you or your partner can get pregnant 7 You or your partner had tubes tied 8 You or your partner had a vasectomy 9 You or your partner had a hysterectomy 10 You or your partner are too old 11 You or your partner are currently breastfeeding 12 You or your partner just had a baby/postpartum 13 Other reason 14 Don't care if get pregnant 15 Partner is pregnant now 16 Don't know/Not sure 77 Refused 99

18.4. How do you feel about having a child now or sometime in the future? Would you say:

Don't want to have one 1

Do want to have one 2

Not sure if you do or don't 3

Don't know/Not sure 7

Refused 9

18.5. How soon would you want to have a child?

Would you say:

Less than 12 months 1

Between 12 months to less than 2 years 2 Between two years to less than 5 years 3

More than 5 years 4 Don't know/Not sure 7

Refused 9

Section 20: HIV/AIDS

20.1. A pregnant woman with HIV can get treatment to help reduce the chances that she will pass the virus on to her baby.

True 1 False 2

Don't know/Not sure 7

Refused 9

20.2. There are medical treatments available that are intended to help a person who is infected with HIV to live longer.  True 1 False 2 Don't know/Not sure 7 Refused 9	20.8 What type of clinic did you go to for your last HIV test? Family planning clinic 1 STD clinic 2 Prenatal clinic 3 Public health clinic 4 Community health clinic 5 Hospital clinic 6 Other 8 Don't know/Not sure 7 Refused 9 20.9 Was this test done by a nurse or other health worker,
not count tests you may have had as part of a blood donation. Yes 1 No 2 Don't know/Not sure 7 Refused 9	or with a home testing kit?  Nurse or health worker 1  A home testing kit 2  Don't know/Not sure 7  Refused 9
20.4. In the past 12 months, how many times have you been tested for HIV, including times you did not get your results: Times Don't know/Not sure 7 7 None 8 8 Refused 9 9	20.10. Do any of these situations apply to you? Yes 1 No 2 Don't know/Not sure 7 Refused 9
20.5. Not including blood donations, in what month and year was your last HIV test?  Code month and year /  Don't know/Not sure 7 7 7 7 7 7  Refused 9 9 9 9 9 9	20.11. In the past 12 months, has a doctor or other health professional talked to you about preventing sexually transmitted diseases through condom use?  Yes 1  No 2  Don't know/Not sure 7  Refused 9
20.6. Not including blood donations, which of these would you say was the MAIN reason for your last HIV test? It was required 01 Someone suggested you should be tested 02 You thought you may have gotten HIV through sex or drug use 03 Wanted to find out whether you had HIV 04 Worried that you could give HIV to someone 05 You were pregnant 06 Part of a routine medical check-up 07 Tested for some other reason 08 Don't know/Not sure 77 Refused 99	Section 21: Firearms 21.1. Are any firearms kept in or around your home? Yes 1 No 2 Don't know/Not sure 7 Refused 9
20.7. Where did you have your last HIV test—at a private doctor or HMO office, at a counseling and testing site, at a hospital, at a clinic, in a jail or prison, at home, or somewhere else? Private doctor or HMO 01 Counseling and testing site 02 Hospital 03 Clinic 04 In a jail or prison 05 Home 06 Somewhere else 07 Don't know/Not sure 77 Refused 99	21.2. Are any of these firearms now loaded? Yes 1 No 2 Don't know/Not sure 7 Refused 9

21.3. Are any of these loaded firearms also unlocked? Yes 1 No 2 Don't know/Not sure 7 Refused 9  Module 1: Diabetes MOD1_1. How old were you when you were told you have diabetes? Code age in years Don't know/Not sure 9 8 Refused 9 9	MOD1_7. About how many times in the past 12 months have you seen a doctor, nurse, or other health professional for your diabetes?  Number of times None 8 8  Don't know/Not sure 9 8  Refused 9 9  MOD1_8. A test for hemoglobin "A one C" measures the average level of blood sugar over the past three months. About how many times in the past 12 months has a doctor, nurse, or other health professional checked you for hemoglobin "A one C"?  Number of times None 8 8  Never heard of hemoglobin "A one C" test 9 8  Don't know/Not sure 7 7  Refused 9 9
MOD1_2. Are you now taking insulin? Yes 1 No 2 Don't know/Not sure 7 Refused 9	MOD1_9. About how many times in the past 12 months has a health professional checked your feet for any sores or irritations?  Number of times  None 8 8  Don't know/Not sure 7 7  Refused 9 9
MOD1_3. Are you now taking diabetes pills? Yes 1 No 2 Don't know/Not sure 7 Refused 9	MOD1_10. When was the last time you had an eye exam in which the pupils were dilated? This would have made you temporarily sensitive to bright light.  Within past month 1  Within past 2 years 2  ≥ 2 years 3  Never 8  Don't know/Not sure 7  Refused 9
MOD1_4. About how often do you check your blood for glucose or sugar?  Times per day 1 Times per week 2 Times per month 3 Times per year 4 Never 5 5 5 Don't know/Not sure 7 7 7 Refused 9 9 9	MOD1_11. Has a doctor ever told you that diabetes has affected your eyes or that you had retinopathy? Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD1_5. About how often do you check your feet for any sores or irritations?  Times per day 1 Times per week 2 Times per month 3 Times per year 4 Never 5 5 5 Don't know/Not sure 7 7 7 Refused 9 9 9	MOD1_12. Have you ever taken a course or class in how to manage your diabetes yourself? Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD1_6. Have you ever had any sores or irritations on your feet that took more than four weeks to heal? Yes 1 No 2 Don't know/Not sure 7 Refused 9	Module 9: Adult Asthma History  MOD9_1. How old were you when you were first told by a doctor or other health professional that you had asthma?  Code age in years Age 10 or younger 9 7  Don't know/Not sure 9 8  Refused 9 9

MOD9_2. During the past 12 months, have you had an episode of asthma or an asthma attack? Yes 1 No 2 Don't know/Not sure 7 Refused 9	MOD9_9. During the past 30 days, how often did you take asthma medication that was prescribed or given to you by a doctor? This includes using an inhaler. Would you say? Less than once a week 1 Once or twice a week 2 More than 2 times a week, but not every day 3 Once every day 4 Two or more times every day 5 Don't know/Not sure 7 Didn't take any 8 Refused 9
MOD9_3. During the past 12 months, how many times did you visit an emergency room or urgent care center because of your asthma?  None 8 8  Don't know/Not sure 9 8  Refused 9 9	Module 10: Childhood Asthma MOD10_1. Earlier you said there were children age 17 or younger living in your household. How many of these children have ever been diagnosed with asthma? Number of children Don't know/Not sure 7 7 None 8 8 Refused 9 9
MOD9_4. During the past 12 months, how many times did you see a doctor, nurse or other health professional for urgent treatment of worsening asthma symptoms?  None 8 8  Don't know/Not sure 9 8  Refused 9 9	MOD10_2. Does this child/How many of these children from Q1 still have asthma? Don't know/Not sure 7 7 None 8 8 Refused 9 9
MOD9_5. During the past 12 months, how many times did you see a doctor, nurse or other health professional for a routine checkup for your asthma?  None 8 8  Don't know/Not sure 9 8  Refused 9 9	Module 13: Folic Acid MOD13_1. Do you currently take any vitamin pills or supplements? Include liquid supplements Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD9_6. During the past 12 months, how many days were you unable to work or carry out your usual activities because of your asthma?  None 8 8 8  Don't know/Not sure 7 7 7  Refused 9 9 9	MOD13_2. Are any of these a multivitamin? Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD9_7. During the past 30 days, how often did you have any symptoms of asthma? Would you say Less than once a week 1 Once or twice a week 2 More than 2 times a week, but not every day 3 Every day, but not all the time 4 Every day, all the time 5 Not at any time 8 Don't know/Not sure 7 Refused 9	MOD13_3. Do any of the vitamin pills or supplements you take contain folic acid? Yes 1 No 2 Don't know/Not sure 7 Refused 9

MOD9_8. During the past 30 days, how many days did symptoms of asthma make it difficult for you to stay asleep? Would you say One or two 1 Three to four 2 Five 3 Six to ten 4 More than ten 5 Don't know/Not sure 7 None 8 Refused 9	MOD13_4. How often do you take this vitamin pill or supplement? Times per day 1 Times per week 2 Times per month 3 Don't know/Not sure 7 7 7 Refused 9 9 9
MOD13_5. Some health experts recommend that women take 400 micrograms of the B vitamin folic acid, for which one of the following reasons To make strong bones 1 To prevent birth defects 2 To prevent high blood pressure 3 Some other reason 4 Don't know/Not sure 7 Refused 9	Module 16: Secondhand Smoke Policy MOD16_1. Which statement best describes the rules about smoking inside your home? Smoking not allowed anywhere inside home 1 Smoking allowed in some places or some times 2 Smoking allowed anywhere inside home 3 There are no rules about smoking inside home 4 Don't know/Not sure 7 Refused 9
Module 15: Smoking Cessation  MOD15_1. About how long has it been since you last smoked cigarettes?  Within the past month 1  Within the past 3 months 2  Within the past 6 months 3  Within the past year 4  Within the past 5 years 5  Within the past 10 years 6  10 or more years ago 7  Don't know/Not sure 77  Refused 99	MOD16_2. While working at your job, are you indoors most of the time? Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD15_2. In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider?  Number of times Don't know/Not sure 7 7  None 8 8  Refused 9 9	MOD16_3. Which of the following best describes your place of work's official smoking policy for indoor public or common areas, such as lobbies, rest rooms, and lunchrooms?  Not allowed in any public areas 1  Allowed in some public areas 2  Allowed in all public areas 3  No official policy 4  Don't know/Not sure 7  Refused 9
MOD15_3. In the last 12 months, how many times have you seen a doctor, nurse or other health professional to get any kind of care for yourself?  Number of times Don't know/Not sure 7 7  None 8 8  Refused 9 9	MOD16_4. Which of the following best describes your place of work's official smoking policy for work areas? Not allowed in any work areas 1 Allowed in some work areas 2 Allowed in all work areas 3 No official policy 4 Don't know/Not sure 7 Refused 9

MOD15_4. On how many visits did your doctor, nurse or other health professional recommend or discuss medication to assist you with quitting smoking, such as nicotine gum, patch, nasal spray, inhaler, lozenge, or prescription medication such as Wellbutrin/Zyban/Buproprion?  Number of times  Don't know/Not sure 7 7  None 8 8  Refused 9 9	Module 17: Arthritis Burden MOD17_1. DURING THE PAST 30 DAYS, have you had symptoms of pain, aching, or stiffness in or around a joint? Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD15_5. On how many visits did your doctor or health provider recommend or discuss methods and strategies other than medication to assist you with quitting smoking?  Number of times Don't know/Not sure 7 7  None 8 8  Refused 9 9	MOD17_2. Did your joint symptoms FIRST begin more than 3 months ago? Yes 1 No 2 Don't know/Not sure 7 Refused 9
MOD17_3. Have you EVER seen a doctor or other health professional for these joint symptoms? Yes 1 No 2 Don't know/Not sure 7 Refused 9	MOD18_4. Have you EVER taken an educational course or class to teach you how to manage problems related to your arthritis or joint symptoms?  Yes 1  No 2  Don't know/Not sure 7  Refused 9
MOD17_4. Have you EVER been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia? Yes 1 No 2 Don't know/Not sure 7 Refused 9	State Added: Fruits and Vegetables AZ1_1. How often do you drink fruit juices such as orange, grapefruit, or tomato? Per day 1 Per week 2 Per month 3 Per year 4 Never 5 5 5 Don't know/Not sure 7 7 7 Refused 9 9 9
MOD17_5. Are you now limited in any way in any of your usual activities because of arthritis or joint symptoms? Yes 1 No 2 Don't know/Not sure 7 Refused 9	AZ1_2. Not counting juice, how often do you eat fruit?  Per day 1  Per week 2  Per month 3  Per year 4  Never 5 5 5  Don't know/Not sure 7 7 7  Refused 9 9 9
MOD17_6. Do arthritis or joint symptoms now affect whether you work, the type of work you do, or the amount of work you do? Yes 1 No 2 Don't know/Not sure 7 Refused 9	AZ1_3. How often do you eat green salad?  Per day 1  Per week 2  Per month 3  Per year 4  Never 5 5 5  Don't know/Not sure 7 7 7  Refused 9 9 9

Appendix III Yuma 2004 BRFSS

Module 18: Arthritis Management	AZ1 4. How often do you eat potatoes not
MOD18 1. Thinking about your arthritis or joint symptoms, which of the	including French fries, fried potatoes, or potato
following best describes you TODAY?	chips?
I can do everything I would like to do 1	Per day 1
I can do most things I would like to do 2	Per day 1 Per week 2
I can do some things I would like to do 3	Per month 3
	Den seen 4
I can hardly do anything I would like to do 4	Per year 4
Don't know/Not sure 7	Never 5 5 5
Refused 9	Don't know/Not sure 7 7 7
	Refused 9 9 9
MOD18 2. Has a doctor or other health professional EVER suggested losing	AZ1_5. How often do you eat carrots?
weight to help your arthritis or joint symptoms?	Per day 1
Yes 1	Per week 2
No 2	Per month 3
Don't know/Not sure 7	Per year 4
Refused 9	Never 5 5 5
Refused 9	Don't know/Not sure 7 7 7
	Refused 9 9 9
MOD18_3. Has a doctor or other health professional EVER suggested	AZ1_6. Not counting carrots, potatoes, or
physical activity or exercise to help your arthritis or joint symptoms?	salad, how many servings of vegetables do you
Yes 1	usually eat?
No 2	Per day 1
Don't know/Not sure 7	Per day 1 Per week 2
Refused 9	Per month 3
	Per year 4
	Never 5 5 5
	Don't know/Not sure 7 7 7
	Refused 9 9 9
State Added Physical Activity	State Added: Cardiovascular Disease
State Added: Physical Activity	
AZ2_1. When you are at work, which of the following best describes what you	AZ4_1. Within the past 12 months, has a
do? Would you say?	doctor, nurse, or other health professional told
Mostly sitting or standing 1	you to
Mostly walking 2	<b>a.</b> Eat fewer high fat or high cholesterol foods?
Mostly heavy labor or physically demanding work 3	Yes 1
Don't know/Not sure 7	No 2
Refused 9	Don't know/Not sure 7
	Refused 9
AZ2 2. Now, thinking about the moderate activities you do in a usual week,	<b>b.</b> Eat more fruits and vegetables?
do you do moderate activities for at least 10 minutes at a time, such as brisk	Yes 1
walking, bicycling, vacuuming, gardening, or anything else that causes some	No 2
increase in breathing or heart rate?	Don't know/Not sure 7
Yes 1	Refused 9
No 2	Refused /
Don't know/Not sure 7	
Refused 9	
Ketuseu y	
AZ2_3. How many days per week do you do these moderate activities for at	<b>c.</b> Be more physically active?
least 10 minutes?	Yes 1
Days per week	No 2
Don't know/Not sure 7 7	Don't know/Not sure 7
Do not do any moderate physical activity 8 8	Refused 9
Refused 9 9	
AZ2 4. On days when you do moderate activities for at least 10 minutes at a	AZ4 2. Has a doctor, nurse or other health
time, how much total time per day do you spend doing these activities?	professional ever told you that you had any of
Hours and minutes per day	the following?
Don't know/Not sure 7 7 7	<b>a.</b> A heart attack, also called a myocardial
Refused 9 9 9	infarction
	Yes 1
	No 2
	Don't know/Not sure 7
	Refused 9
L	

AZ2_5. Now, thinking about the vigorous activities you do in a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate?  Yes 1  No 2  Don't know/Not sure 7	<b>b.</b> Angina or coronary heart disease Yes 1 No 2 Don't know/Not sure 7 Refused 9
Refused 9	
AZ2_6. How many days per week do you do these vigorous activities for at least 10 minutes at a time?  Days per week Don't know/Not sure 7 7  Do not do any moderate physical activity 8 8  Refused 9 9  AZ2_7. On days when you do vigorous activities for at least 10 minutes at a time doing these activities?  Hours and minutes per day Don't know/Not sure 7 7 7  Refused 9 9 9	c. A stroke Yes 1 No 2 Don't know/Not sure 7 Refused 9 e, how much total time per day do you spend
State Added: Oral Health AZ3_1. Do you have any kind of insurance coverage that pays for some or all of your routine dental care, including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid/AHCCCS? Yes 1 No 2 Don't know/Not sure 7 Refused 9	State Added: Family Planning AZ5_1. Have you or your partner been pregnant in the last five years? Yes 1 No 2 Don't know/Not sure 7 Refused 9

APPENDIX III: 2004 ARIZONA QUESTIONNAIRE		
AZ5_2a. Thinking back to your last pregnancy, just		
before you got pregnant, how did you for	eel about	
becoming pregnant? Would you say:		
Wanted to be pregnant sooner	1	
Wanted to be pregnant later	2	
Wanted to be pregnant then	3	
Didn't want to be pregnant then or at		
anytime in the future	4	
Don't know/Not sure	7	
Refused	9	
AZ5_2b. Thinking back to just before y	ou got pregnant	
with your current pregnancy, how did y		
about becoming pregnant? Would you	say:	
Wanted to be pregnant sooner	1	
Wanted to be pregnant later	2	
Wanted to be pregnant then	3	
Didn't want to be pregnant then or at	,	
anytime in the future	4	
Don't know/Not sure	7	
Refused	9	

# **APPENDIX IV: 2004 BRFSS WEIGHTING FORMULA**

#### FINALWT = STRWT \* 1 OVER NPH \* NAD \* POSTSTRAT

FINALWT is the final weight assigned to each respondent.

STRWT accounts for differences in the basic probability of selection among strata (subsets of area code/prefix combinations). It is the inverse of the sampling fraction of each stratum. There is almost never a complete correspondence between strata, which are defined by subsets of area code/prefix combinations, and regions, which are defined by the boundaries of government entities.

1/NPH is the inverse of the number of residential telephone numbers in the respondent=s household.

NAD is the number of adults in the respondent=s household.

POSTSTRAT is the number of people in an age-by-gender or age-by-race-by-gender category in the population of a region or a state divided by the sum of the products of the preceding weights for the respondents in that same age-by-gender or age-by-race-by-gender category. It adjusts for non-coverage and non-response and, before 1995, also adjusts for different probabilities of selection by region, where applicable.